

Running head: TEACHERS' SELF-REGULATION

# Preservice Teachers' Motivational Beliefs and Self-Regulation of Learning

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**Preservice Teachers' Motivational Beliefs and Self-Regulation of Learning****Abstract**

Successful learners are those who engage in self-regulation of learning by using learning strategies to secure task completion. They exercise behavioral control to not only choose or plan valuable academic tasks, but also to maintain motivation and intention in the light of distracting alternatives. It was expected that teachers' self-efficacy beliefs, motivational beliefs, academic delay of gratification, and self-regulation of learning would be positively related to each other. Taken together, the results revealed a high correlation between the teacher candidates' motivational beliefs, willingness to delay gratification, and use of self-regulated learning strategies, and their teacher self-efficacy beliefs. Taken together, these findings supported the notion that preservice teachers with a greater sense of teaching efficacy in fact reported a high academic sense of intrinsic interest, task value, and control of time and study environment.

**Preservice Teachers' Motivational Beliefs and Self-Regulation of Learning**

Successful learners exercise behavioral control to not only choose or plan valuable academic tasks, but also to maintain motivation and intention in the light of distracting alternatives (Zimmerman, 1998). They engage in self-regulation of learning by using learning strategies to secure task completion. *Self-regulation of learning* is a process that required students to get proactively involved in their personal, behavioral, motivational, and cognitive learning endeavors in order to accomplish important and valuable academic goals (Zimmerman, 1998). Current research has provided valuable information about how students use self-regulation. However, little is known about teacher candidates' engagement in self-regulation of learning.

The field of teacher education has recently received a call to shift from teachers; preparation programs centered around teachers' knowledge of their content area, ability to pass state-mandated tests, and classroom management skills, to an examination of their beliefs, motivation, and self-regulatory factors associated with teaching and learning (Dembo, 2001; Randi, 2004). For illustrate, Dembo (2001) proposed that learning to teach content area is not enough; rather, he proposed that future teachers also need to learn how to learn and how to self-regulate their learning process. Further, he proposed that the curricula of preservice teacher preparation programs should introduce self-regulated learning strategies into the theory and research of human learning.

Another important component of teacher preparation programs and teaching practice is the *teachers' sense of efficacy*. In this regard, Tschannen-Moran and Woolfolk (2001) observed, "teachers' sense of efficacy is an idea that neither researchers nor practitioners can afford to ignore" (p. 803). It follows, then, that the more that sense of efficacy can help preservice teachers sustain motivation and engage in self-regulation, the stronger their performance in academic courses will be. Bandura (1997)

conceptualized *self-efficacy* as “beliefs in one’s capabilities to organize and execute the courses of actions required to produce given attainments” (p. 3). Bandura (1986) later noted, “self-development of efficacy requires mastering knowledge and skills attainable only through long hours of arduous work. This often necessitates sacrifice of many immediate gratifications” (p. 448). Thus, it is expected that preserves teachers’ self-efficacy beliefs would be associated with their motivational beliefs and self-regulation of learning.

An important component of self-regulation of learning is academic delay of gratification. Bembenutty and Karabenick (1998) defined *academic delay of gratification* as learners’ intentions to postpone immediate available rewards in order to obtain larger rewards temporally distant. Delay of gratification is important for self-regulation of learning because, for example, alternatives to academic goals are attractive, in part, because they offer immediate gratification, in contrast to rewards for academic goals (e.g., grades, degrees) that are temporally remote. Delay of gratification is associated with students’ use of learning strategies such as help seeking (Bembenutty & Karabenick, 1998). Delay of gratification is associated with students’ use of learning strategies such as organization, elaboration, rehearsal, critical thinking, help seeking, peer learning, as well as students’ motivation for learning, such as self-efficacy, task value, and intrinsic interest. Bembenutty and Karabenick (1998) found that preference for delay options is related to students’ final course grade, high self-efficacy, and intrinsic motivation. However, little is known about teacher candidates’ willingness to delay gratification.

Another important component of self-regulation of learning is intrinsic interest. *Intrinsic interest* refers to individuals’ engagement in a task for the sake of the task itself (Hidi, 1990; Sansone & Harackiewicz, 2000). Learners with intrinsic interest in

academic tasks display enjoyment in doing those tasks, show curiosity and mastery orientation, prefer challenging and novel tasks, often exceed teachers' expectations, are not afraid of criticism and feedback, impose internal demands and standards on themselves, find novel ways to do assignments, and produce high academic performance (Sansone & Harackiewicz, 2000). Preservice teachers are expected to display intrinsic interest in academic tasks associated with their teaching programs since they have willingly chosen that path as their future career. Thus, it is expected that intrinsic interest will be associated with preservice teachers' motivational beliefs and self-regulation of learning.

### **Research Hypothesis**

From the theoretical notions and empirical findings discussed above, the researcher derived the following hypothesis: Teachers' self-efficacy beliefs, motivational beliefs, academic delay of gratification, and self-regulation of learning will be positively related.

### **Method**

Participants in this study were 63 secondary education preservice teachers enrolled in a classroom management course required during their graduate educational program at an urban college in New York. Most of students possess provisional teaching certification and were working on obtaining a permanent certification. The administration of the instruments took place during regular instruction in the classroom.

#### ***Instruments:***

***Ohio Teacher Sense of Efficacy Scale (OTSES).*** A week before taking the non-graded practice test, participants responded to the 24-item teachers' self-efficacy scale, developed by Tschannen-Moran and Hoy (2001). The OTSES measures teachers' efficacy of student engagement, instructional strategies, and classroom management. A

sample item was: “To what extent can you craft good questions for your students?” The format for all items in the survey was a 9-point scale, ranging from 1 = *nothing* though 9 = *a great deal*. Internal consistency reliability, as estimated by Cronbach alpha, was .93 for the present sample.

***Academic Self-efficacy Scale.*** Preservice teachers also responded to an instrument, which assessed their self-efficacy beliefs for successfully learning the material from the course in which they were enrolled (Bembenutty, 2005; Pintrich et al., 1993). To illustrate, a sample item from the academic self-efficacy scale was: “I am sure that I can learn all the material for the SEYS 718 final exam.” Rating scale options ranged from 1 = *strongly disagree* to 7 = *strongly agree*.

***Academic Delay of Gratification.*** The researchers used an adapted version of the scale developed by Bembenutty and Karabenick (1998) to assess academic delay of gratification through ten scenarios (Bembenutty, 2005). The scale assesses course-specific academic delay of gratification to complete and learn the tasks and concepts of the course in which participants were currently enrolled. The students rated their preference for an immediately available attractive option versus a delayed alternative. Sample contrast items were “Hang out with your friends and then cram for the SEYS 718 final exam” versus “Postpone hanging out with your friends until after you have taken the SEYS 718 final exam.” Students responded on a 4-point scale: *Definitely choose A*, *Probably choose A*, *Probably choose B*, and *Definitely choose B*. Responses were coded and averaged across items so that the scores ranged from 1 to 4, with higher values indicating a greater delay of gratification ( $M = 3.14$ ,  $SD = .79$  for this current study). Internal consistency reliability, as estimated by Cronbach alpha, was .33 for the present sample.

**Motivational Beliefs.** Preservice teachers also responded to an instrument, which assessed their intrinsic interest, self-efficacy for learning, task value, and metacognition in the course, and in the material they were learning (Bembenutty, 2005). A sample item from the scale was: "I enjoy answering challenging questions related to this class." Rating scale options ranged from 1 = *strongly disagree* to 7 = *strongly agree*.

**Academic Self-regulation.** To assess the use of self-regulated learning strategies such as goal setting, self-monitoring, and self-evaluation in the course in which they were currently enrolled, preservice teachers responded to an academic self-regulation scale (Bembenutty, 2005). A sample item from this scale was: "How often do you keep a record on how well you are doing in this course in preparation for the final examination?" Rating scale options ranged from 1 = *never* to 7 = *always*. Internal consistency reliability, as estimated by Cronbach alpha, was .90 for the present sample.

## Results

To test the association between the variables in this study, zero-order correlations were calculated (please see Table 1). The data partially supported the hypothesis. Students with higher teacher self-efficacy beliefs scores reported high intrinsic interest, task value, and use of metacognitive strategies. Teacher candidates with high task value reported high use of metacognitive strategies, self-efficacy for learning, and teacher self-efficacy. Teacher candidates with high intrinsic interest reported high task value, use of metacognitive strategies, self-efficacy for learning and teacher self-efficacy. Teacher candidates with high control of their time and study environment reported high self-efficacy belief for learning and teacher self-efficacy. High willingness for academic delay of gratification was positively correlated with self-efficacy for learning and self-regulation for learning.

## Discussion

Taken together, the results revealed a high correlation between the teacher candidates' motivational beliefs, willingness to delay gratification, and use of self-regulated learning strategies, and their teacher self-efficacy beliefs. These findings supported the notion that preservice teachers with a greater sense of teaching efficacy in fact reported a high academic sense of intrinsic interest, task value, and control of time and study environment. Likewise, teacher candidates who had high sense of efficacy beliefs that they could motivate and communicate well with their students also reported greater preference to stay task-focused, preferred to avoid having fun with friends when assignments are not completed, and selected to control their social and physical environment. Further, preservice teachers with a high sense of efficacy also strategically selected ways to approach learning, in particular, their use of metacognitive strategies, which includes effective planning, self-monitoring, and self-evaluating of their academic progress.

The preservice teachers in the present study understood the importance of controlling their actions, achieving their goals, self-monitoring their academic progress, and evaluating the completion of their tasks. They understood that they need to transform their motivation into action to remain focused on the execution of an important action that will complete their teacher training. These self-regulatory processes direct preservice teachers to initiate an action and select appropriate learning strategies, despite competing alternatives or rewards. The preservice teachers here reported knowing how to motivate themselves and increase and sustain their efforts when temptations arise; consequently, they reported remaining confident and maintaining beliefs in their capabilities.



The present findings reveal the role that motivational beliefs and self-regulatory processes play on students who are enrolled in teacher preparation programs. Clearly, self-efficacy belief is of paramount importance for effective preparation of future teachers. Likewise, helping preservice teachers to learn how to use self-regulatory strategies and implement effective strategies during their training is essential. In conjunction with this is helping teacher candidates learn to postpone immediate impulses for the sake of long-term academic goals.

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**Table 1. Correlations between the Variables**

Variables	Correlations						
	1	2	3	4	5	6	7
1. Intrinsic Motivation	-----						
2. Task Value	.697**						
3. Metacognition	.440**	.483**					
4. Time and Study Environment	.372**	.256	.305*				
5. Self-Efficacy for Learning	.385**	.332**	.286*	.142			
6. Self-regulation	.032	.027	.045	.184	.463**		
7. Delay of Gratification	.248	.077	.154	.198	.425**	.251*	
8. Teachers' Self-efficacy	.556**	.358**	.511*	.102	.177	.125	.130

Note. \*\* Correlation is significant at the 0.01 level. \* Correlation is significant at the 0.05 level.